Oil India Limited
(A Govt. Of India Enterprise)

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ASSAM , INDIA
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TENDER NO. : **SDG3270P10/07**

TENDER FEE : Rs. 4,500.00 OR US$ 100.00

PERFORMANCE SECURITY : APPLICABLE

OIL INDIA LIMITED invites Global Tenders for the item detailed below:

Srl. No.	Material Description	Unit	Qty
1	NITROGEN PUMPING UNIT (DETAILED SPECIFICATION HAS BEEN FURNISHED VIDE ANNEXURE – A)	NO	1

N O T E S :

1.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet NO. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) and its amendments.

2.0 Bid Rejection Criteria / Bid Evaluation Criteria is furnished vide Annexure-B of tender document.

3.0 Commercial Check list is furnished vide Annexure – C. Please ensure that the check list is properly filled up and uploaded along with Technical bid.

4.0 The item qualifies for Nil duty / Deemed Export benifits. For Deemed Export benefits, please refer Addendum to the General terms and conditions for Global tender.

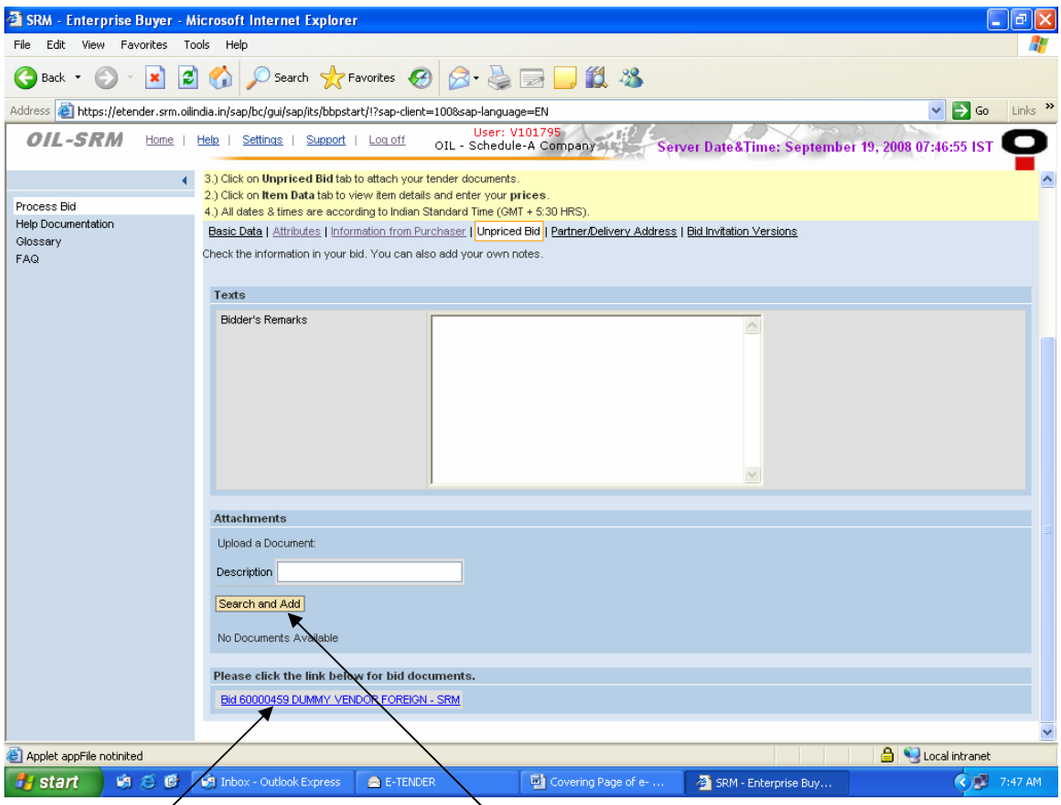
5.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The **Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam** on or before the Bid Closing Date and Time mentioned in the Tender.

a) **Original Bid Security .**

b) **Details Catalogue. and any other document which have been specified to be submitted in original**

Contd….2

7.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders are required to submit both the "TECHNICAL" and "COMMERCIAL" bids through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. Please ensure that Technical Bid / all technical related documents related to the tender are to be uploaded in the c-Folder link (collaboration link) under Un-priced Bid Tab Page only. Please note that no price details should be uploaded as c-Folder link (collaboration link) under Un-priced Bid Tab Page. Details of prices as per Bid format / Commercial bid can be uploaded as Attachment in the attachment link Search and Add **under "Unpriced Bid" under "General Data". A screen shot in this regard is given below. Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in Annexure-II (Refer Clause 1.0 of (B) Commercial)**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No Documents Available
Please click the link below for bid documents.
Bid 60000459 DUMMY VENDOR FOREIGN - SRM

C-FOLDER LINK

Details of prices as per Bid format / Commercial bid can be uploaded in this Attachment

8.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.

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ANNEXURE-A
TO TENDER NO. SDG3270P10/07

SUPPLY OF AN OIL FIELD TRUCK MOUNTED NITROGEN PUMPING UNIT (NPU)

SCOPE OF WORK:

Self contained Non fired Nitrogen pumping Unit (NPU) mounted on a Oil field truck capable of pumping and vaporizing 1,80,000 SCFH (maximum) along with a storage tank of capacity 2000 US gallons of liquid nitrogen. The design/ selection of engine and transmission should be such that the same unit can be used for haulage as well as for pumping.
The unit shall have nitrogen pumping vaporizing system capable of pumping up to 1, 80,000 SCFH of gaseous nitrogen and pressure up to 10,000 psi. Nitrogen pumping system shall have liquid nitrogen storage tank to feed the liquid nitrogen through a boost pump with valve manifold system. The nitrogen pumping system should have a triplex pump, high pressure-piping manifold, non-fired vaporization system and control system mounted on truck chassis as detailed below:

1.0 APPLICATION:

For operation in oil / gas / injection wells for carrying out the following well servicing jobs:
Well unloading & activation, Sand cleaning, Removal of fill etc. and any other Well intervention jobs together with / without Coiled Tubing Unit.

Maximum Well depth : 5500.0 metres.
Working pressure : maximum 10,000 psig.
Fluid to be handled : Liquid Nitrogen.
Working atmosphere: ambient temp : 5 ^{0}C to 45 ^{0}C in a relative humidity of maximum 95%.

2.0 EQUIPMENT DETAIL:

2.1 TRUCK CHASSIS AND PLATFORM:

Brand New Truck chassis manufactured not prior to six months from the date of issuance of Letter of Intent (LOI). The truck chassis must be of **Kenworth/ International/ Peterbilt / Volvo make** and shall be suitable for operation in rough terrain, typical oil field roads and dessert environment. The platform where the Nitrogen Pumping Unit equipment shall be mounted should robust in design and capable of withstanding and transmitting static as well as dynamic loads uniformly to the chassis. The bidder shall take special care in selecting and designing the platform considering the unit's application in rough terrain and typical oilfield roads. The offered model shall be latest and conforming to international quality standard norms, having specifications, fittings, accessories, etc. as under -

2.1.1 DIMENSION (COMPLETE UNIT)

Overall Width - Should not exceed 2.6 meter
Overall Height - Should not exceed 3.5 meter
Overall Length - Should not exceed 13.0 meter
Ground Clearance - Not less then 30.0 cm. It shall be bidder's endeavour to mount subsequently fitted undercarriage components (i.e. other than originally mounted components) at maximum possible height.

2.1.2 ENGINE

Water-cooled diesel engine of adequate power (within the range 425 - 500 HP at around 2100 RPM) suitable for road drive as well as Coil Tubing operation. The

engine shall conform to minimum EURO-III or equivalent Emission Norms and of make Caterpillar/ International/ Cummins/ Volvo only. In case of engine with Electronic Controller System, Engine Fault Diagnostic & Repair Tool (both Software and complete Hardware) shall be supplied along with the unit. Bidder shall categorically confirm in the bid that the offered software is for the particular engine model of the truck.

2.1.3 TRANSMISSION

Fully automatic transmission system of Allison or Volvo make suitable for both road drive and pump operations for nitrogen pumping. The transmission system must have requisite compatibility with the engine.

Suitable Transfer Case & other PTO's as per design/requirement.

2.1.4 DRIVE & STEERING

Drive	-	6X4 Drive (Single non powered front axle & two Powered rear axles).
Steering	-	Right hand drives Hydraulic Power Assisted Steering (Steering wheel on the right hand).
Turning Radius	-	Minimum Turning Radius approx. 16.00 meters.

2.1.5 SUSPENSION, GVW & AXLES

A.	**Front Suspension**	-	Heavy Duty Multi-Leaf Spring Suspension of suitable design with Shock Absorbers.
B.	**Rear Suspension**	-	Rocker Beam (Walking Beam) suspension with auxiliary leaf springs or rubber cushion support of suitable design with shock absorbers.
C.	**Laden Weight**	-	Within 30,000 Kg
	Front Axle Capacity	-	As per Design
	Rear Axle Capacity	-	As per Design
D.	Rear Axles shall have Inter Axle Lock facility.		
E.	Actual loading on each individual axle (front as well as rear) shall be within 85% (eighty-five percent) of the maximum load bearing capacity **i.e. Laden Weight of the unit shall be within 85% (eighty-five percent) of *Maximum Permissible Gross Vehicle Weight* (i.e. sum of Axle Capacities of all axles i.e. GVWR) of the unit.** [Laden Weight means – Weight of the complete unit with all equipment & fittings i.e. weight of the chassis with driver's cabin + weight of all pumping equipment permanently mounted on the unit + Liquid filled Storage Tank + weight of other tools, accessories, etc. generally being carried/kept in the unit, spare wheels, hydraulic & diesel oil, etc. Accordingly, Laden Weight is the sum of actual loading on each individual axle.]		

2.1.6 WHEELS & RIMS

Suitable wheels (2 Nos. at Front Axle, 8 Nos. at Rear Axles) with Tube & Tire of adequate ply rating with two sets of complete spare wheels (even in case of identical front & rear wheels).

Super Single tyre is not acceptable.

It shall be bidder's endeavour to offer front and rear wheels of same size & type. If not possible for design constraint, **two spare wheels - one for each type** shall be supplied. Suitable lifting & mounting arrangement facility for spare wheels shall be provided.

2.1.7 BRAKE

A. Service Brake - Multiple Circuit Pneumatic S-Cam brake acting on all wheels.

B. Parking/ Emergency Brake - Parking Brake operating through hand operated shifter valve. It shall automatically get engaged in the event of low/ no air pressure.

C. All Emergency / Parking Brake Servos shall have manual release mechanism (Screw Type) to release the brake manually in case of low/ no air pressure for maintenance.

D. All air tanks shall have Drain Plugs.

E. All wheel brake drums shall have Dust Cover.

F. Buzzer warning for low air pressure.

G. In case of brake with ABS, ABS Fault Diagnostic & Repair Tool (both Software as well as complete Hardware) shall be supplied along with the unit.

2.1.8 FUEL TANK

Two nos. of fuel tanks each of minimum 100 USG (380 Lts.) capacity with suitable strainer at the opening of the tank to prevent entry of foreign materials & locking arrangement shall be provided.

2.1.9 DRIVER'S CABIN

Factory build (original built & supplied with chassis by chassis manufacture) ergonomically designed floating steel / aluminium driver's cabin complete with all standards fittings. Sitting capacity inside the cabin should preferably be 3(three) including the driver.

2.1.10 OTHER FITTINGS & ACCESSORIES

A. Sufficient Side marker lights, Hazard warning lights, rear & side reflectors, Air horn in additional to electric horn, etc. for safe movement of the unit on road.

B. 2 (two) Nos. Rear Searchlight mounted on rear top of driver's cabin for illuminating rear equipment for night working.

C. While all lights shall be covered to the extent possible with suitable guard to prevent damage; all electrical fittings / components / connections shall be suitable to operate in hazardous oilfield area.

D. Gauges & meters including Engine Tachometer & Hour meter as per standard inside driver's cabin. Speedometer & Odometer with metric KM calibration only. Two Nos. fan inside driver's cabin.

E. It shall be bidder's endeavour to provide the Engine Oil Pressure & Temperature meters, Air pressure meter, Transmission oil pressure & Temperature meters (if any) with high low warning buzzers.

F. Suitable Reversing Audio Alarm with Blinker lights at rear of the unit.

G. Suitable Air Dryer with replaceable type filter element for truck's pneumatics.

H. Well covered & non conducting material wrapped Vertical Exhaust located behind and projected above the top of the driver's cabin.

I. Suitable heavy duty front & rear Towing Hook capable of pulling/towing the unit from bogged down situation in slushy areas in oilfields from front as well as rear.

J. Electrical equipment like starter, alternator, etc. shall be of Lucus or Delco Remy make.

K. Engine start in transmission neutral position in case of Automatic Transmission.

L. Suitable electrical Master Switch to disengage all electrical circuits from battery.

M. Well covered Battery Box, Standard Tool Kit in a portable box for general maintenance of the truck, heavy duty grease gun, wheel wrench & handle, 2 (two) Nos. min. 30 MT capacity hydraulic jack with handle, 2 (two) Nos. stopper block for rear wheels.

N. Fire Extinguisher & First Aid Box inside the driver's cabin.

O. Suitable spark arrestor for engine exhaust for operation in oilfield area.

2.2 PUMPING SYSTEM:

2.2.1 CRYOGENIC TRIPLEX PLUNGER PUMP:

The Cryogenic Triplex pump shall be installed on the truck chassis and shall be hydraulically powered. The pump should be capable of pumping liquid Nitrogen equivalent to 180,000 SCFH (85 m^3/min) of gaseous Nitrogen.
The pump shall have the following specifications:
Max discharge Pressure : 10,000 Psi
Bore size : 1.625 inches
Stroke : 1.38 inches
Lubrication : force feed suitably with a hydraulically driven Lube pump
Make of the pump is either CS&P / ACD or Hydra Rig.

2.2.2 CRYOGENIC BOOST PUMP:

Hydraulically driven Boost Pump to feed liquid nitrogen into the Triplex Pump of the following specification:

Type	: Centrifugal type for cryogenic application
Pump size	: 1.5" X 2.5" X 6"
Maximum delivery rate	: Liquid Nitrogen equivalent to 180,000 SCFH of gaseous Nitrogen

The delivered pressure at the inlet of Triplex Pump should be sufficient enough so that no starvation is developed at any speed of the Triplex pump.
Make : CS & P/ ACD or Hydra Rig.

2.2.3 VAPORIZER / HEAT EXCHANGER:

The vaporizer should be capable of handling Nitrogen Flow rate 180,000 SCFH (max) with Max. Working Pressure 10,000 psi to raise the temperature of the discharged Nitrogen upto 40^0C. Pressure drop between the inlet and the outlet of the vaporizer should not more than 500 psi with any one of the following operating principle:

Option 1:

A) A water bath vaporizer would be the main source of vaporization utilizing the waste heat in the vehicle engine coolant, hydraulic oil and the lube oil system for heating up the Liquid Nitrogen coming out from the Triplex Pump for vaporization.
B) An exhaust vaporizer would be the secondary source of vaporization. A diverter valve shall allow the operator to divert a portion of the liquid nitrogen flow from the triplex pump through this vaporizer utilizing the heat of the exhaust.

Option 2:

A) Forced Air ambient vaporizer circulating hot air through Hydraulic Oil cooler, Engine radiator with the help of hydraulic driven fan.
B) An exhaust vaporizer would be the secondary source of vaporization. A diverter valve allows the operator to divert a portion of the liquid nitrogen flow from the triplex pump through this vaporizer utilizing the heat of the exhaust.

Note: In both the options, the temperature of the coolant coming out from the vaporizer (i.e. inlet to the engine radiator) should be maintained in such a manner that it does not affect in the performance of the engine.

2.2.4 LIQUID NITROGEN TANK:

The bidder shall provide Liquid Nitrogen Tank of following specifications:

i) 2,000 US gallon gross capacity
ii) 50 psi Maximum Allowable Working Pressure at maximum temperature – 320^0F (minus 320^0 F)
iii) Stainless steel inner vessel
iv) Carbon steel outer vessel
v) The tank should be manufactured as per American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section VIII, Division 1.
vi) Super insulation compatible with a high vacuum to minimize heat flux and consequential product boil off. Allowable evaporation rate shall be 0.75% per day.
vii) To provide pressure build coils to maintain set pressure of the vessel
viii) The tank gauge panel shall include the following:
    1. Liquid level gauge (Differential type)
    2. Tank vapor pressure gauge
ix) A vacuum probe valve complete with thermocouple probe for checking the vacuum of the tank
x) A valve manifold shall be installed on the tank and shall contain the following:
    1. An air actuated valve to automatically control the tank pressure
    2. An air actuated valve to automatically vent when the vapor pressure exceeds the desired set pressure

3. A hydraulically / pneumatically actuated valve to allow the operator to bleed the gas pressure off the tank as required during pumping operations. This vent should be routed to the ground
4. One (1) no. of 2" tank safety relief valve
5. A rupture disc assembly to prevent over pressuring the tank
6. One 1/4" outlet with a valve for filling of Liquid Nitrogen in small cans.

2.3 DISCHARGE MANIFOLD:

The discharge connection consists of following:

i. 2" full flow, spring loaded, reset Relief valve : 1 (One) no.
ii. 15,000 psi discharge liquid filled pressure gauge: 1 (One) no.
iii. Discharge Nitrogen temperature gauge : 1 (One) no.
iv. 2" X 15,000 psi Gate valve : 1 (One) no.
v. 2" X 15,000 psi Plug valve : 1 (One) no.

All piping shall be suitable for Liquid Nitrogen service.

3.0 CONTROL CABIN AND INSTRUMENTATION SYSTEM:

3.1 CONTROL CABIN:

Control cabin designed for two-person operation. The cabin should be provided with hydraulically adjustable lifting mechanism. Cabin will have windows on all four sides for better visibility. Entry doors shall be on both side of the cabin. One no. of 0.75 meter wide ladder with handrails should be included. The cabin should be air-conditioned.

3.2 CONTROL PANEL:

Stainless steel panel shall be mounted inside of control cabin.
Instruments installed in this panel shall be liquid filled with brass or stainless steel bodies. The control system should be predominantly hydraulic. Use of electronic / electrical control should be minimized to the extent possible. Hydraulic / Pneumatic Displacement Controls should be given priority over Electric Displacement Control while designing the unit.
The gauges and controls that will be required to be installed in this Panel will be as follows:

i) Engine coolant temperature gauge
ii) Engine oil pressure gauge
iii) Lube oil temperature gauge.
iv) Engine rpm
v) Engine start / stop
vi) Hydraulic oil pressure gauge.
vii) Hydraulic Temperature gauge
viii) Air Pressure gauge
ix) Transmission oil temperature gauge.
x) Transmission oil pressure gauge.
xi) Triplex Pump Control
xii) Triplex pump power end lube oil pressure gauge and additional pressure gauge with direct power end lube oil system
xiii) Triplex pump rate and total pumped.
xiv) Triplex pump press (Martin-Decker), Suction & Delivery
xv) Gaseous Nitrogen Discharge Pressure Gauge
xvi) Discharge Nitrogen Temperature gauge at the outlet of vaporizer

xvii) Boost Pressure gauge
xviii) Boost control valve
xix) Emergency shut down
xx) Normal shut down
xxi) Lights on / off
xxii) Air horn
xxiii) Transmission shifter
xxiv) Throttle control
xxv) Vaporizer control system
xxvi) Vaporizer outlet coolant temperature gauge
xxvii) Delivery line temperature gauge (Pyrometer)
xxviii) Audiovisual Safety alarms for safe operation and protection of main equipment of the unit.

All the above gauges shall be of dual scale, English & Metric.

4.0 HYDRAULIC SYSTEM:

Individual closed loop hydraulic system should be provided for

1. Cryogenic Boost Pump
2. Triplex Pump
3. Lube Pump
4. Fan drive for vaporizer (if required)

5.0 ILLUMINATION:

The unit should have an inbuilt electrical system to provide sufficient illumination to enable emergency operation during night hours.

6.0 PIPING:

1. All cryogenic piping system irrespective of pressure rating shall be new
2. Low pressure piping will be 304 stainless steel and will have flex hoses to allow for movement
3. A strainer will be installed between the boost pump discharge and the suction manifold of the triplex pump. There will be gauge connection ports on both sides of this strainer to allow the operator to view the pressure before and after the strainer.
4. The low pressure suction piping between the tank and boost pump shall be 2 inch stainless steel.
5. Boost / Triplex priming valves to allow flow from the boost pump directly back to tank for priming the pumps
6. Low pressure relief valves should be installed in the low pressure piping where the possibility of trapping liquid nitrogen exists
7. Two side fill lines, one on either side of the unit and a rear fill line with manual shutoff ball valves, manual bleeder valves and relief valves shall be installed
8. The load manifold will be configured to allow both top and bottom filling of the storage tank
9. On the discharge side of the cold ends, a “U” shaped discharge line will tie into a discharge manifold. This “U” shaped line allows for expansion and contraction. The liquid nitrogen discharge manifold will be supported to prevent excess vibration
10. All high pressure piping connections will be capable of 15,000 psi Maximum Allowable Working Pressure.
11. The discharge line will incorporate a check valve, bleeder valve and plug valve with wing to the wellhead.

7.0 TREATING IRON / DISCHARGE MANIFOLD:

The following items are to be supplied with this unit as well as convenient iron racks.

QTY.	DESCRIPTION
Eight (8)	2” x 3m long straight joint with 1502 union ends
Two (2)	2” x 1.5m long straight joint with 1502 union ends
Two (2)	2” style 10 type swivels with 1502 union ends
Four (4)	2” style 50 type swivels with 1502 union ends
One (1)	2” dart style check valve with 1502 union ends
One (1)	2” plug valve with 1502 union ends
Two (2)	3″x 3m liquid nitrogen hoses with storage tubes, rated working pressure 150 psi complete with wing connections.

The above treating iron will be 15,000 psi rated working pressure. All high pressure iron shall be of make FMC or SPM.

8.0 TOOLS:

One set of relevant tools for operation and maintenance of the unit for all equipment, engines, pumps, associated hydraulic system, Allison transmissions, PTO, etc. to be supplied
Apart from the Tools mentioned in para **2.1.10 M** the following additional tools shall be supplied along with the unit.

Pipe Wrench (size 12”, 18”, 24”)	: 3 no (each)
Combination Spanners	: 2 sets
Combination Pliers	: 2 nos
Allen Key Set	: 2 nos.
Screw Drivers (plain, Size 6” X 10”)	: 2 nos
Screw Drivers (Philips Size 6” X 10”)	: 2 nos
Fire Extinguisher	: 1 no.
Special tools wrenches for Pump servicing	: 1 set
Aluminum ladder	: 1 no

9.0 SPARES

9.1 COMMISSIONING SPARES

The Supplier has to supply all the spare parts required for initial commissioning of the unit.

9.2 OPERATIONAL CRITICAL SPARES:

Supplier shall supply the following operational critical spares along with the supply of the UNIT.

i) AUTOMOBILE SPARE PARTS LIST:

Following spares in specified quantity as indicated shall be supplied along with the unit. Specific description, part Nos., Make etc. & unit price of each & every spares shall clearly be indicated in the bid for bid evaluation.

A. ENGINE -

1. Fuel Filter Element - 10 Nos.
2. Water Separator Filter Element - 10 Nos.

3.	Engine Oil Filter Element	-	10 Sets
4.	Air Filter Element	-	10 Sets
5.	Water/Corrosion Filter Element	-	05 Nos.
6.	Fan Belt	-	04 Sets
7.	Alternator Belt	-	04 Sets
8.	Compressor Belt	-	04 Sets
9.	Water Pump Repair Kit	-	02 Sets
10.	Water Hose	-	04 Sets
11.	Engine Mounting	-	01 Set

B. TRANSMISSION -

1.	Transmission Filter Element	-	04 Sets
2.	Transmission Mounting	-	02 Sets
3.	Gear Shifter (one inside driver's Cabin)	-	01 No.
4.	Gear Shifter Repair Kit	-	02 Sets
5.	Gear Shifter Hoses	-	02 Nos.

C. TRANSFER CASE (if any) & POWER TAKE OFF (PTO) -

1.	Oil Filter Element, if any	-	04 Sets
2.	Mounting	-	02 Sets
3.	Oil Seal	-	02 Sets
4.	PTO actuator Seal Kit	-	05 Nos.

D. FRONT AXLE -

1.	Wheel Stud with Nuts	-	20 Nos.
2.	Axle Stud with Nuts	-	20 Nos.
3.	Wheel Hub Oil Seal	-	02 Sets*
4.	Wheel Hub Bearing	-	01 Set*

(* set comprising of items for one wheel)

E. REAR AXLE -

1.	Wheel Stud with Nuts	-	30 Nos.
2.	Axle Stud with Nuts	-	20 Nos.
3.	Wheel Hub Oil Seal	-	02 Sets*
4.	Wheel Hub Bearing	-	02 Sets*
5.	Differential Oil Seal	-	02 Sets*
6.	Differential Filter Element (if any)	-	02 Sets

(* set comprising of items for one wheel / differential)

F. DRIVELINE (Propeller Shaft) -

1.	UJ Cross (Spider & Bearing)	-	01 Set*

(*set comprising of different UJ crosses complete for both front & rear drivelines)

G. STEERING -

1.	Steering Oil Filter Element	-	02 Sets
2.	Steering Pump Repair Kit	-	01 Set
3.	Steering Box/Cylinder Repair Kit	-	03 Sets
4.	Tie Rod End (for both sides)	-	02 Sets

H. BRAKE & PNEUMATICS -

1.	Foot Brake Valve Repair Kit	-	03 Sets
2.	Repair Kit for Front Wheel Servo	-	04 Sets*
3.	Repair Kit for Rear Wheel Servo	-	08 Sets*
4.	Air Dryer Filter Element	-	08 Nos.
5.	Repair Kit for all Pneumatic Valves	-	01 Set each

(* set comprising of items for one servo)

I. ELECTRICAL -

1.	Engine Starter	-	01 No.
2.	Alternator	-	01 No.

ii) SPARES FOR NITROGEN PUMPING UNIT

1	Tank relief valve	: 1 no
2	Rapture disk, Cryogenic tank	: 2 no
3	Valve repair kit for all sizes of valve used in the cryogenic piping	: 1 each
4	Tank content gauge	: 1 no
5	Flexible cryogenic pipings used in the cryogenic pipe connection	: 1 each
6	Cryogenic boost pump repair kit	: 1 set
7	Cryogenic triplex cold end repair kit	: 3 set
8	High pressure cryogenic pipe connector (i.e SS tee, cross, elbow, Collet joint etc)	: 1 spare unit for each
9	High pressure hydraulic line filter for all types of filter fitted with the unit	: 1 set
10	Joystick to control blower speed (or its alternate)	: 1 no
11	Joystick to control Triplex speed (or its alternate)	: 1 no
12	Plug valve repair kit (Nitrogen discharge line)	: 1 no
13	Cryogenic pump warm end repair kit	: 1 no
14	Flow meter to measure LN2 discharge	: 1 no
15	Thermo couple, cable and meter to measure discharge temp	: 1 set
16	Pump lube oil filter	: 2 no
17	Pump lube pressure sensor	: 1 no
18	Pump lube temp sensor	: 1 no
19	Pump discharge pressure gauge	: 1 no
20	Pilot operated relief valve for boost pump control	: 1 no

NOTE -

- **a.** All spares in specified quantity as indicated above shall be supplied along with the unit.
- **b.** Specific description, Part Nos., Make etc. and Unit Price of each and every item shall clearly be indicated in the bid.
- **c.** In case of any difference in spares for vehicle's left & right wheel studs, axle studs, etc., the specified quantities will be divided into 2 (two) equal parts.
- **d.** Bidder shall also quote separately for any additional spares with similar details as felt necessary for 2 (two) years trouble free operation and maintenance but not covered in this list for future reference / procurement- NOT FOR BID EVALUATION.

9.3 RECOMMENDED SPARES:

The bidder shall furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc. throughout the life of the equipment complete with price of each item. Annual consumption of each spare should be furnished. The bidder should also provide detailed spare list of all the items including bought out items in the operation and maintenance manuals. The list should include a spare parts list along with OEM part numbers, make & model of the equipment and contact postal address of OEM for all items of the whole unit. THE PRICE QUOTED FOR RECOMMENDED SPARES WILL **NOT** BE TAKEN IN TO ACCOUNT FOR BID EVALUTION.
The bidder has to submit a complete spare parts list for the whole unit sub grouping major component in the following format as shown with example:

Name of the component / Sub com.	**Description of the item**	**Part no./ID no of item**	**Frequency of replacement (in Hours/Day)**	**Make**
Triplex Pump	Piston Piston Ring Gland packing Locking out etc.	Xx Xxx Xxxx Xxxxx	10000 7000 5000 5000	Make and part no of the subunits are also to be provided.
Booster pump	Bearing Gland packing Hydraulic pump Gasket etc.	Yy Yyy Yyyy Yyyyy	10,000 10.000 20,000 10,000	-do- - -do- -
Instrumentation items	Temp control, Nitrogen pressure etc.	Part no.		-do-

9.4 The bidders must submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the Certified date of completion / successful field commissioning of the unit.

10.0 UNITIZATION AND COMPLETION:

The above unit shall be fully assembled, unitized and completed as per best industrial practice. This shall include the following items:

i) Installation of all electrical systems.
ii) Installation of all pneumatic systems.
iii) Installation of all hydraulic systems.
iv) All operating oils, coolants and other operating fluids will be drained prior to shipment.
v) All fixtures to ship complete with the unit.
vi) Steel toolbox
vii) All tanks (Fuel, Hydraulic oil etc) shall be fitted with suitable filter and locking arrangement
viii) All labor to complete unit.
ix) Workmanship should be of good quality and appearance. Following is a partial list of examples
    a) Flame cut edges shall be ground smooth. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth.
    b) Bolt holes shall be drilled (not torch cut)
    c) Welds shall be of good quality and of sufficient strength.
    d) Use self-locking nuts.

e) All hoses will be well supported with support type clamps.
f) All hose assemblies will have swivel ends.
g) All hoses will be protected by well secured rubber sleeves to prevent rubbing by frame, etc tagged for easy identification
h) All reservoirs constructed of steel plate with level gauge, cleanouts, vent fill cap, etc.

Noise level for the complete unit in running condition should not cross 90.0 db.

11.0 STANDARDS:

The complete pumping unit shall be built under the quality standards of

i) EURO III
ii) ASME standards
iii) The Static and Mobile Pressure Vessels (Unfired) SMPV (U) Rules, 1981, India

The operations of this unit shall be covered under the

i) Government of India Ministry of Labour,
ii) Directorate General of Mines Safety, Dhanbad, India.

12.0 TECHNICAL MANUAL AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues **in printed form** (in English language) shall be supplied along with the unit in addition to the supply of the same in Compact Disk (CD). **Supply of the manuals/ catalogues only in Compact Disk is not acceptable**. **Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the particular vehicle and equipment only, not a general Composite Manual/Catalogue.**

A. 4 (Four) sets of printed Spare Parts Catalogue and Workshop & Service Manual for all components/systems of truck chassis like engine, transmission, axles, brakes, suspension, electrical & pneumatic systems, etc. with complete schematics of electrical & pneumatic circuits.
B. 2 (two) sets of Operator's manual for vehicle.
C. 1 (One) set of Engine Fault Diagnostic & Repair Tool manuals in case of engine with Electronic Controller System
D. 1 (One) set of ABS Fault Diagnostic & Repair Tool manuals in case of brake with ABS.
E. The bidder has to supply 4 (Four) sets of operating, maintenance and spare parts manual detailing maintenance schedule for daily maintenance, preventive maintenance, major overhauling and frequency of spares replacement for all the components of the unit. The operation and maintenance manual should also contain details of all sub assemblies, instrument sensors, wiring diagram hydraulic schematics with colour code and entire requisite spare parts with part no (Preferably OEM part no. with detail contact address).
F. 4 (Four) copies of all relevant test and quality control certificates of the manufacturing and testing of all unit functions and parameters shall be supplied.
G. 4 (Four) sets of all relevant test and calibration certificate for each instrument shall be supplied along with the unit.
H. The necessary licensed software in original packages along with user software backups are also to be supplied

COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLET UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED

13.0 INSPECTION CUM ACCEPTANCE –

1) Third Party inspection of the unit is to be carried out for all the component of the unit by OIL approved TPI agency (viz M/s Lloyds, M/s Bureu Veritas, M/s Tuboscope Vetco, M/s IRS, M/s Rites or M/s DNV only). Scope of 3rd party inspection:
   i) Witness the manufacturing and assembly
   ii) Witness the functional and performance tests
   iii) Any other requirement of the inspection agency to satisfy of the equipment as per applicable standards.

2) Pre shipment inspection shall be carried out by OIL (by representative of user as well as service dept viz. Instrumentation, Transport Dept. Field Engineering etc.) at manufacturer's site. The supplier shall inform OIL at least 2 (two) months ahead for such inspection to enable OIL to send its inspectors. The supplier has to arrange to inspect the unit by a team of 5 (five) OIL's engineers. OIL will bear the expenses towards traveling and accommodation etc. of the OIL's inspection team. The Inspection cum Acceptance process would include the following minimum steps/tasks but not limited to -

   a. Physical verification/inspection of all the items/fittings/accessories including all Parts Catalogue, Maintenance & Service Manuals, Final Chassis Built Up/Vehicle Content Record documents, etc. and **actual loading on axles**. The supplier shall arrange driver/operator, weighing facility and any other infrastructure during the process of inspection as and when required.
   b. Operational testing of the carrier.
   c. Supplier shall have to take note of any minor modification(s) for operational requirement suggested by the inspector and comply with the same at no extra cost to OIL.
   d. The inspection report would be prepared at the end of the inspection and jointly signed by both the parties.
   e. Supplier shall confirm in writing compliance of all the points raised in the inspection report as well as any other subsequent additions/changes, following deliberation with the inspector after arrival at Duliajan.
   f. Supplier will affect despatch of the unit only on receipt of OIL's despatch advice.

14.0 TRAINING TO OIL PERSONNEL ON NPU SYSTEM:

The supplier shall have to provide training to OIL personnel in two phases -

14.1 During the pre-despatch inspection visit of OIL's engineers, the supplier shall arrange comprehensive training at their manufacturing plant/works for a period of minimum 2(two) weeks on Operation & Maintenance, Troubleshooting and Working Principle of followings systems/items used in the unit amongst other relevant subjects –

i) Engine and its Electronic Controller System.
ii) Transmission, Transfer Case and their control systems.
iii) Brake & ABS - including their electronic control system.
iv) Power assisted steering system including hydraulic pump and gearbox.
v) Pneumatic system for brake, transmission, PTO shifters including different valves.
vi) Hydraulic system
vii) Control Panel
viii) NPU operation & trouble shooting
ix) Repairing and Maintenance of Cryogenic Pumps and Vessels.

14.2 During installation and commissioning of the unit, the commissioning engineer shall have to provide field training as well as class room training for a period of 1(one) week to OIL Engineers and technicians on Maintenance, troubleshooting, Working Principle and repair/ replacement of different equipment.

Bidders should quote their training charges separately for evaluation purposes. The charges should be shown in Commercial bid only.

15.0 COMMISSIONING:

15.1 The unit shall be commissioned at Duliajan, Assam, India with 3 (three) successful field jobs at different wells after arrival within a period of 2(two) weeks time.

15.2 The successful bidder must quote for commissioning charges which should include the to and fro charges, food & lodging and daily charges of the personnel. OIL will provide accommodation (on payment basis) subject to availability. OIL will provide local transportation to the commissioning personnel.

15.3 The commissioning engineer should be available at site within 15 days of the intimation given by OIL for commissioning the unit.

15.4 Bidders should quote commissioning charges separately for evaluation purposes. The charges should be shown in Commercial bid only.

16.0 GUARANTEE / WARRANTY:

The bidder shall offer a period of at least 1 (one) year warranty for the entire equipment supplied from the date of successful field commissioning of the entire equipment.

OIL reserves the right to inspect, test and if necessary reject any part/parts after delivery at site (including incomplete manuals, catalogues, etc.) in case of any fault on the part of the supplier. It shall in no way be waived by the reason that the unit/item was previously inspected and passed by OIL as per Inspection Clause detailed elsewhere in the NIT.

To keep the unit fully operational, in case of failure of any item during the warranty period, it shall be the supplier's responsibility to arrange replacement/repairing at site at their cost including customs, freight, etc. within a period of maximum 3(three) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly.

17.0 DEVIATIONS FROM THE SPECIFICATIONS:

The bidder shall enclose comprehensive list of intended deviations from the technical specifications, of any clearly highlighting the reasons thereof, along with the bid. If no deviations from the Technical specifications are intended, the same shall be confirmed in the offer. But OIL reserves the right for acceptance or rejection of the deviation.

18.0 BID SUBMISSION & DOCUMENTATIONS:

A. Bidder's response to all NIT stipulations should clearly be defined maintaining the same sequence as in the NIT. **Bidder shall furnish specific details/specifications of all major components, systems with Make & Model etc.** Submission of technical leaflet/catalogue alone is not sufficient.
General Response like- **'As per NIT Specifications / Technical Leaflet', 'Noted' etc. or in any similar fashion is not encouraged**. Quoting only the NIT stipulation

without any confirmation of acceptance of the same and/or without any confirmation of offering the same is also not acceptable.

18.1 Following documents shall be submitted along with bid for evaluation **–**

a) Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, power take off, transfer case (if any), axle, suspension, steering, brake, etc.
b) Detail dimensional layout drawing(s) illustrating Driver's Cabin & position of all major components & their mounting on the vehicle.
c) List of items that shall be supplied under the Engine Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).
d) List of items that shall be supplied under brake ABS Diagnostic & Repair Tool (both Software as well as complete Hardware).
e) List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.
f) Specific description, Part Nos., Make, etc. & Unit Price of each and every spares to be supplied along with the unit (for bid evaluation) as detailed in the Operational Spares list provided in the NIT.
g) List of additional spares, if any, as felt necessary but not covered in the Operational Spare list with Description, Part Nos., Make, etc. including Unit Rate (for future reference / procurement only; not for bid evaluation).
h) Checklist as per enclosed format shall be furnished along with the bid.
i) The weight of individual major equipment to be mounted on the truck chassis.

18.2 Following documents are to be submitted along with supply/unit –

a) Sale Letter, Pollution & Roadworthy Certificate (in similar format of Form 21 & 22A of Indian Motor Vehicle Act - sample copies enclosed), Engine Emission Norms Certificate, etc. as required under Indian Motor Vehicle Act for registration of the unit in the name of **Oil India Limited.**
b) Final Chassis Built Up/Vehicle Content Record documents from chassis manufacturer.
c) Specification Sheet of unit indication all details viz Make & Model of chassis, engine, transmission, etc, GVWR, Axle Capacity, Axle Loading, Wheelbase, etc., number of Axles, wheels & tyres, etc., overall dimensions, turning radius, etc.
d) Certificate of Origin for the chassis in original from chassis manufacturer. Amongst others, the certificate shall contain following information –

i. Make & Model of Chassis.
ii. Vehicle Identification Number (VIN i.e. Chassis No.)
iii. Month & Year of Manufacture of the chassis.
iv. Make & Model of Engine.
v. Serial No. of Engine.
vi. Month & Year of Manufacture of the engine.

e) Notwithstanding any clause mentioned elsewhere in the NIT, the invoice for the complete unit shall be submitted in 2 (two) parts separately as under -

i. **Invoice for Truck Chassis** - it shall include the cost of the truck chassis with driver's cabin only.

ii. **Invoice for Nitrogen Pumping Unit -** it shall include cost of all equipment of Pumping unit, tools, accessories, etc. subsequently fitted in the original truck chassis as well as supplied separately along of the unit.

General Notes:

1) Payment: Payment shall be released as follows:

i) 80 % of the supply made by the supplier shall be paid against proof of despatch/shipment of the goods.

ii) Remaining 20 % of the supply value along with commissioning charges shall be paid after successful commissioning and acceptance of the unit by OIL.

iii) Training charges will be paid only after successful completion of training.

OIL may also consider making 100 % payment towards supply of the units against proof of despatch provided bidders agree to pay interest for 20 % of the order value and also submit Bank Guarantee for the amount equivalent to 20 % of the order value. This is in addition to the 10 % of the order value towards Performance Security as per the NIT requirement.

Any offer not complying with the above shall be loaded with one percent above the prevailing Bank Rate (CC rate) of State Bank of India for evaluation purpose.

2) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

3) Oil India Purchase Order No. must be engraved on the body of the item. Bidder must confirm the same categorically in their quotation.

4) The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. Indigenous bidder shall be eligible for Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/GLOBAL/E-01/2005 enclosed.

C H E C K L I S T

Part A TECHNICAL

A1.1 TRUCK					
Sl. No.	**PARAMETERS / REQUIREMENTS**			**BIDDER'S OFFER (To indicate details or yes/no, as applicable)**	**REMARKS, IF ANY**
1	Make & Model of Chassis				
2	Max. Permissible Gross Vehicle Weight (GVWR)				
3	Drive				
4	Wheelbase				
5	Overall Dimensions (Width, Height & Length) of complete unit				
6	Ground Clearance				
7	Laden Weight (Total weight of the unit)				
8	Engine	a	Make & Model		
		b	Max. Output Power		
		c	Max. Output Torque		
		d	Naturally Aspirated or Turbo Charged		
		e	Emission Norms		
		f	Control System (Electronic?)		
		g	Type of Fuel(Diesel/ Petrol)		
9	Transmission (Main)	a	Make & Model		
		b	No. of gears		
		c	High/Low provision		
10	Make, Model & Type of Transmission Shifter				
11	Make & Model of Transfer Case, if any				
12	Total number of PTOs in operation				
13	Make & Model of PTOs				
14	Make, Model & Type of Steering System				
15	Minimum Turning Radius				
16	Make, Model & Type of Front Suspension				
17	Make, Model & Type of Rear Suspension				
18	Axle Capacity	a	Front		
		b	Rear		
19	Axle Loading (actual loading)	a	Front		
		b	Rear		
20	Axle Loading within 85% of capacity.				
21	Type, Size of Wheel & Tyre	a	Front		
		b	Rear		
22	Type of Service Brake (S-cam or not)				
23	Type of Wheel Brake Servos(screw type manual release or not)	a	Front		
		b	Rear		
24	Fuel Tank capacity				
25	Number of fuel tank				
26	Seating Capacity inside Driver's cabin.				

27	Reversing Alarm with Blinker Lights			
28	Electrical fittings/equipment suitable for hazardous oilfield area.			
29	Speedometer/Odometer in Metric (KM) calibration.			
30	Provision of Air Dryer in truck's pneumatic system.			
31	Towing Hooks at Front & Rear of truck.			
32	Make of Starter, Alternator, etc. of engine.			
A 1.2 PUMPING SYSTEM				
1	Cryogenic Triplex Plunger Pump as per Clause No 2.2.1	Make and model		
		Capacity		
		Maximum Working Pressure		
		Bore size		
		Stroke		
		Lubrication		
2	Cryogenic Boost Pump as per Clause No 2.2.2	Make and model		
		Type		
		Pump size		
		Maximum Delivery rate		
3	Vaporizer / Heat Exchanger as per option 1 or 2 of as per Clause No 2.2.3	Option		
		Maximum flow rate		
		Capacity		
		Out let temperature of N2		
		Pressure drop		
4	Liquid Nitrogen Tank as per Clause No 2.2.4	Capacity		
		Working Pressure		
		Inner vessel		
		Outer vessel		
		Design code		
		Evaporation rate		
		Pressure build coils		
		Valve manifold		
5	Discharge Manifold, size, rating as per Clause No 2.3			
6	Control Cabin as per Clause No 3.1			
7	Control Panel as per Clause No 3.2	Type of Instrument installed		
		Type of control system		
		All Gauges type (dual scale)		
		All gauges version (Metric & English)		
8	Hydraulic System as per Clause No 4.0	Cryogenic Boost Pump		
		Triplex Pump		
		Lube Pump		

		Fan Drive		
9	Illumination as per Clause No 5.0			
10	Piping as per Clause No 6.0			
11	Treating Iron / Discharge Manifold as per Clause No 7.0			
12	Tools as per Clause No 8.0			
13	Spares as per Clause No 9.0	Commissioning spares		
		Operational critical spares		
		Recommended spares		

Part B DOCUMENTATIONS

Sl. No.	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, transfer case (if any), PTOs, suspension, axle, steering, wheel & rim, brake, etc.		
2	Detailed dimensional layout drawing illustrating Driver's Cabin and all major items / components.		
3	List of items that shall be supplied under Engine Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).		
4	List of items that shall be supplied under ABS Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).		
5	Technical literature with detailed specifications for cryogenic triplex plunger pump, driving mechanism, pumping capacity etc.		
6	Technical literature with detailed specifications for cryogenic boost pump, driving mechanism, pumping capacity etc.		
7	Technical literature with detailed specifications, layout drawing, heating mechanism etc. for vaporizer/heat exchanger.		
8	Technical literature with detailed specifications, layout drawing, design code etc. for liquid nitrogen tank.		
9	List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.		
10	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares as detailed in the Operational Spare Parts List.		
11	List of any additional spares with details as felt necessary for 2 (two) years trouble free operation and maintenance but not covered in this list of Operational Critical Spares for future reference/ procurement- NOT FOR BID EVALUATION.		
12	Relevant test and quality control certificates of the manufacturing and testing of all unit		

13	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares for pumps, control panel etc.		
14	Licensed software in original along with user software backups		

Signature _____
Name _____
Designation _____

*- This is a sample copy **similar to FORM 21 of Indian Motor Vehicle Act** only. The certificate to be issued by supplier shall contain following minimum information. -*

SALE CERTIFICATE

Certified that …… (brand name of the vehicle) has been delivered by us to …… on …… (date).

Name of the buyer ……..……

Address …….

The details of the vehicles are as under -:

1. Class of vehicle ……..
2. Maker's name & address ……..
3. Chassis No. ……..
4. Engine No. ……..
5. Horse power or cubic capacity ……..
6. Fuel used ……..
7. Number of cylinders ……..
8. Month and year of manufacturing ……..
9. Seating capacity (including driver) ……..
10. Unladen weight ……..
11. Maximum axle weight, number and description of tyres –
    - (a) Front axle ……..
    - (b) Rear axle/axles ……..
    - (c) Any other axle ……..
12. Colour (s) of the body ……..
13. Gross vehicle weight ……..
14. Type of body ……..

Date: …… **Signature of the manufacturer / dealer**

*- This is a sample copy s**imilar to FORM 22(A) of Indian Motor Vehicle Act** only. The certificate to be issued by supplier shall contain following minimum information. -*

CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS / SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS

Certified that …… (brand name of the vehicle) bearing Chassis number …… and Engine number …….. complies with the ……. (name of Emission Standard – Euro III, etc.) Emission standard as well as other Safety & Road Worthiness Standards as per provisions of the …….. (name of Motor Vehicles Act of country of origin).

It is also certified that body of the above vehicle has been fabricated by us and the same complies with the provisions of the …….. (name of Motor Vehicles Act of country of origin).

Signatures of Manufacturer / Body Builder

ANNEXURE-B
TO TENDER NO. SDG3270P10/07

Bid Rejection Criteria (BRC) & Bid Evaluation Criteria (BEC)

(I) BID REJECTION CRITERIA (BRC)

The bid must conform to the specifications and terms and conditions given in the enquiry. Bid will be rejected in case the items offered do not conform to all the technical requirement stipulated in the technical specifications as given in ANNEXURE - A. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected.
Bid evaluation will be done only for those bids that pass through the Bid rejection criteria (BRC) as stipulated in this document.

A. Technical

1.0 Bidder's Qualification

1.1 The bidder may be an Original Equipment Manufacturer (OEM) having experience in manufacturing of Nitrogen Pumping Unit (NPU).

OR

1.2 The bidder may be an authorized dealer of OEM.

2.0 Bidder's Experience

2.1 The OEM should have the experience of successful completion (including installation & commissioning of the equipment) of at least one order in the last 5 (five) years preceding from the bid closing date of this enquiry against supply, installation & commissioning of Nitrogen Pumping Unit (NPU). The OEM's (Original Equipment Manufacturer) documentary evidence in this regard must be provided in the form of copy of Purchase Order, Commissioning Report / Completion Certificate from the Clients along with the bid.

2.2 In case of an authorized dealer, the Bidder must have credentials in support of successful completion (including installation & commissioning of the equipment) of at least one order in the last 5 (five) years preceding from the bid closing date of this enquiry against supply, installation and commissioning of Nitrogen Pumping Unit (NPU). As a proof of evidence, the Bidders must furnish a list of installations carried out by them during last 5 years preceding from the bid closing date of this tender including customer contact details. The bidder shall submit the valid authorization certificate in original from the OEM, technical support and warranty back up from OEM along with the bid, failing which offer will be rejected. The OEM of the authorized dealer must have experience of manufacturing of Nitrogen Pumping Unit (NPU) in the last 5 years preceding from the bid closing date of this tender. The OEM's (Original Equipment Manufacturer) documentary evidence in this regard must be provided in the form of Purchase Order, Commissioning Report/ Completion Certificate from the Clients along with the bid.

3.0 CONFORMITY TO THE NIT SPECIFICATIONS:

3.1 Bidder must fill the Technical datasheet enclosed with the offer.
3.2 The total axle capacity shall be at par with the GVW with all equipment.
3.3 The offered engine shall conform to minimum EURO-III or equivalent Emission Norms and of make Caterpillar/ International/ Cummins / Volvo only as per clause no. 2.1.2.
3.4 Detailed specifications of all the systems including Mechanical, Electrical, Pneumatic and Hydraulic should be provided.
3.5 The bids and the accompanied technical documentation must be in English language only. The bids with other than English language must have an English version.
3.6 Bidder must undertake that the provision for supplying spares (including bought out items) of the equipment will be continued for next ten (10) years from the certified date of completion / successful field commissioning of the unit.
3.7 Bidders offering other than the specified make of the equipment will be rejected.
3.8 The bidders must confirm that the offered Nitrogen Pumping Unit shall perform at the desired rate and parameters as mentioned in clause no.2.0 of Technical Specification.
3.9 The bidders are to confirm categorically the commissioning clause as mentioned in 15.0.

B. Commercial

1.0 Bids are invited under Single Stage Two Bid System. Bidders shall quote accordingly under Single Stage Two Bid System. Bidder not complying with submission procedure mentioned in General Terms & Conditions of Global Tender will be rejected.

2.0 Bid security of US $ 12,000 or Rs. 5,00,000 shall be furnished as a part of the TECHNICAL BID. Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 9.8(Section A) of General Terms and Conditions for Global Tender. The Bid Security shall be valid for 240 days from the date of bid opening.

3.0 Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of eighteen months from the date of shipment/dispatch or twelve months from the date of successful commissioning whichever is earlier against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.

4.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for one year from the date of successful commissioning of the equipment or 18 months from the date of shipment / despatch whichever is earlier. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

5.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.

6.0 Validity of the bid shall be minimum 180 days. Bids with lesser validity will be rejected.

7.0 Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

8.0 Bidders shall quote directly and not through Agents in India. Offers made by Indian Agents on behalf of their foreign principals will be rejected. Similarly offers from unsolicited bidders will be rejected.

9.0 Bids containing incorrect statement will be rejected.

10.0 Bidders are required to submit the summary of the prices in their commercial bids as per bid format (Summary), given below :

(i) <u>Commercial Bid Format (Summary) for Foreign Bidders</u> :

(A) Cost of Nitrogen Pumping Unit
(B) Cost of spares (Refer Clause 9.2 of Annexure-A)
(C) Cost of Commissioning spares, if any
(D) Grand Total Material Cost, (A + B + C)
(E) Third Party inspection charges, if any
(F) Pre-despatch/shipment Inspection charges, if any
(G) Packing & FOB Charges
(H) Total FOB Port of Shipment value, (D + E + F + G) above
(I) Ocean Freight Charges up to Kolkata, India
(J) Insurance Charges
(K) Total CIF Kolkata value, (H + I + J)
(L) Installation / Commissioning charges
(M) Training Charges
(N) Total Value, (K + L + M) above
(O) Total value in words :
(P) Gross Weight :
(Q) Gross Volume :

(ii) <u>Commercial Bid Format (SUMMARY) for Indigenous Bidders</u> :

(A) Cost of Nitrogen Pumping Unit
(B) Cost of spares (Refer Clause 9.2 of Annexure-A)
(C) Cost of Commissioning spares
(D) Grand Total Material Cost, (A + B + C)
(E) Third Party inspection charges, if any
(F) Pre-despatch/shipment Inspection charges, if any
(G) Packing and Forwarding Charges
(H) Total Ex-works value, (D + E + F + G) above
(I) Excise Duty with Cess, (Please indicate applicable rate of Duty)
(J) Sales Tax, (Please indicate applicable rate of Tax)
(K) Total FOR Despatching station price, (H + I + J) above
(L) Road Transportation charges to Duliajan
(M) Insurance Charges
(N) Total FOR Duliajan value, (K + L + M) above
(O) Installation / Commissioning charges
(P) Training Charges
(Q) Total Value, (N + O + P) above

(R) Total value in words :
(S) Gross Weight :
(T) Gross Volume :

NOTE :

1. The Commissioning Spares should be quoted separately indicating the unit price and quantity quoted.

2. The Nitrogen Pumping Unit covered under this enquiry will be used by OIL in the PEL/ML areas issued/renewed after 01/04/99, applicable Customs Duty for import of goods shall be ZERO. Indigenous bidders shall be eligible for Deemed Export and should quote Deemed Export prices. Excise Duty under Deemed Export exempted.

3. Installation/Commissioning charges and Training charges must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport at Duliajan and other expenses of supplier's commissioning/training personnel during their stay at Duliajan, Assam(India). All Income, Service, Corporate Taxes etc. towards the services provided under installation / commissioning shall be borne by the supplier and will be deducted at source at the time of releasing the payment. Bidder should also confirm about providing all these services in the Technical Bid.

4. Pre-despatch/Shipment Inspection charges, if any, must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. The to and fro fares, boarding/lodging and other enroute expenses of OIL's Engineers shall be borne by OIL.

   Bidders must categorically indicate the Installation / Commissioning, Training and Pre-despatch/Shipment Inspection charges in their offers and must confirm the same in their Technical bids. Offers, without any quote for the Installation / Commissioning, Training and Pre-despatch/Shipment Inspection charges, shall be loaded with the maximum charges received for the same against the tender for evaluation purposes. Moreover, if any bidder does not quote the Income, Service, Corporate taxes etc., the offer shall be loaded with the applicable rate of taxes for evaluation purposes.

11.0 LIQUIDATED DAMAGE: Supplier's competent personnel must arrive at Duliajan within 15 days from the date of intimation by OIL and complete the installation & commissioning job thereafter within the time mentioned in the tender. OIL, on the other hand, shall inform the party immediately on receipt of the goods at Duliajan. Liquidated Damage will be levied for any failure on the part of the supplier in completing the installation and commissioning of the Units @ 0.5% per full week or part thereof to a maximum of 10% of the total installation/commissioning charges.

(II) BID EVALUATION CRITERIA (BEC) :

The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection

Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below :

1.0 The evaluation of bids will be done as per the Price Schedule (SUMMARY) detailed vide Para 10.0 of BRC (Commercial).

2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

3.0 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.

4.0 Offers not complying with the payment terms indicated in the enquiry shall be loaded with one percent above the prevailing Bank rate (CC rate) of State Bank of India for evaluation purpose.

5.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.

5.1 <u>When only foreign bids are involved</u> :

Comparison of bids will be done on the basis of "**TOTAL VALUE**" which is estimated as under:

(A) Cost of Nitrogen Pumping Unit
(B) Cost of spares (Refer Clause 9.2 of Annexure-A)
(C) Cost of Commissioning spares
(D) Grand Total Material Cost, (A + B +C)
(E) Third Party inspection charges, if any
(F) Pre-despatch/shipment Inspection charges, if any
(G) Packing & FOB Charges
(H) Total FOB Port of Shipment value, (D + E + F + G) above
(I) Ocean Freight Charges up to Kolkata, India
(J) Insurance Charges
(K) Banking Charges @ 0.5% of Total FOB Value vide (H) above in case of payment through Letter of Credit (If confirmed L/C required, 1.5% of Total FOB Value will be loaded)
(L) Total CIF Kolkata value, (H + I + J + K)
(M) Installation / Commissioning charges
(N) Training Charges
(O) Total Value, (L + M + N) above
(P) Total value in words :

<u>NOTE</u> : **Banking charge in the country of the foreign bidder shall be borne by the bidder**.

5.2 **When only domestic bids are involved** :

Comparison of bids will be done on the basis of "Total Value" which is estimated as under :

(A) Cost of Nitrogen Pumping Unit
(B) Cost of spares (Refer Clause 9.2 of Annexure-A)
(C) Cost of Commissioning spares
(D) Grand Total Material Cost, (A + B + C)
(E) Third Party inspection charges, if any
(F) Pre-despatch/shipment Inspection charges, if any
(G) Packing and Forwarding Charges
(H) Total Ex-works value, (D + E + F + G) above
(I) Excise Duty with Cess, (Please indicate applicable rate of Duty)
(J) Sales Tax, (Please indicate applicable rate of Tax)
(K) Total FOR Despatching station price, (H + I + J) above
(L) Road Transportation charges to Duliajan
(M) Insurance Charges
(N) Assam Entry tax, if any
(O) Total FOR Duliajan value, (K + L + M + N) above
(P) Installation / Commissioning charges
(Q) Training Charges
(R) Total Value, (O + P + Q) above
(S) Total value in words :

NOTE: **Excise Duty in case of the indigenous bidder is EXEMPTED.**

5.3 **When both Foreign and Domestic bids are involved** :

The Total Value of domestic bidder (inclusive of customs duty on imported raw material and components etc, and applicable terminal excise duty on the finished products and Sales Tax) excluding inland transportation to destination and Insurance charges worked out as per Para 5.2 above and Total Value of the foreign bidder worked out as per Para 5.1 above excluding inland transportation to destination will be compared. No price preference will be allowed to indigenous bidders except that for capital goods, the domestic manufacturers would be accorded a price preference to offset CST to the extent of 4 % or actuals, which ever is less subject to 30 % local content norms as stipulated for World Bank Funded project to the satisfaction of OIL. When more than one domestic bidders fall within price preference range, inter-se-ranking will be done on Total Value basis.

6.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

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ANNEXURE-C
TO TENDER NO. SDG3270P10/07

COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT 'YES' OR 'NO' TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

1	Whether quoted as manufacturer ?	YES / NO
2	Whether quoted as Supply House / Distributor. To Specify :	YES / NO
3	If quoted as Supply House / Distributor,	
	(a) Whether submitted valid and proper authorization letter from manufacturer confirming that bidder is their authorized Supply House for the product offered ?	YES / NO
	(b) Whether manufacturer's back-up Warranty/Guarantee certificate submitted	YES / NO
4	Whether bid submitted under Two Bid System ?	YES / NO
5	Whether ORIGINAL Bid Bond(not copy of Bid Bond) submitted? If YES, provide details	YES / NO
	(a) Amount :	
	(b) Name of issuing Bank :	
	(c) Validity of Bid Bond :	
6	Whether offered firm prices ?	YES / NO
7	Whether quoted offer validity of six months from the date of closing of tenders ?	YES / NO
8	Whether quoted a firm delivery period?	YES / NO
9	Whether quoted as per NIT (without any deviations) ?	YES / NO

10	Whether quoted any deviation ?	YES / NO
11	Whether deviation separately highlighted ?	YES / NO
12	Whether agreed to the NIT Warranty clause ?	YES / NO
13	Whether Price Bid submitted as per Price Schedule (refer Para 10.0 of BRC vide Annexure – B)	YES / NO
14	Whether the Spares quoted as per Clause 13.0 of Annexure-A?	YES / NO
15	Whether quoted all the items of tender ?	YES / NO
16	Whether indicated the country of origin for the items quoted?	YES / NO
17	Whether technical literature / catalogue enclosed?	YES / NO
18	Whether confirmed that all spares & consumables will be supplied for a minimum period of 10 years from successful commissioning?	YES / NO
19	Whether confirmed to carry out installation & Commissioning at Duliajan (Assam)?	YES / NO
20	Whether installation & Commissioning charges applicable?	YES / NO
21	If installation & Commissioning charges applicable, whether separately quoted on lump sum basis?	YES / NO
22	Whether to & fro air fares, boarding/lodging of the commissioning personnel for installation & commissioning at Duliajan, Assam (India) included in the quoted charges ?	YES / NO
23	Whether confirmed that all Service, Income, Corporate tax etc. applicable under installation & Commissioning are included in the prices quoted?	YES / NO
24	Whether confirmed that Training will be provided in the event of placement of order?	YES / NO
25	Whether the cost of Training has been furnished in the offer?	YES / NO

26	Whether to & fro air fares, boarding/lodging of the Training personnel for providing Training at Duliajan, Assam (India) included in the quoted charges ?	YES / NO
27	Whether confirmed that all Service, Income, Corporate tax etc. towards Services provided under Training are included in the prices quoted ?	YES / NO
28	Whether confirmed acceptance of tender Payment Terms of 80% against shipment/dispatch documents and balance 20% after successful installation & commissioning ?	YES / NO
29	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	YES / NO
30	For Foreign Bidders – Whether port of shipment indicated. To specify:	YES / NO
31	For Indian bidders – Whether indicated the place from where the goods will be dispatched. To specify :	YES / NO
32	For Indian bidders – Whether road transportation charges up to Duliajan quoted ?	YES / NO
33	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges ?	YES / NO
34	Whether Indian Agent applicable ?	YES / NO
35	If YES, whether following details of Indian Agent provided ?	YES / NO
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	
	(c) Whether agency commission included in quoted material value?	
36	Whether weight & volume of items offered indicated ?	YES / NO
37	Whether Pre-despatch/shipment inspection & testing quoted?	YES / NO
38	Whether charges towards Pre-despatch/shipment inspection & testing applicable?	YES / NO
39	If Pre-despatch/shipment inspection & testing charges applicable, whether quoted separately?	YES / NO
40	Whether confirmed to submit PBG as asked for in NIT ?	YES / NO

41	Whether agreed to submit PBG within 30 days of placement of order ?	YES / NO
42	For Indian Bidders only - Whether offered Deemed Export price?	
43	For Indian Bidders only - Whether indicated import content in the offer ?	YES / NO
44	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted ?	YES / NO
45	Whether all BRC/BEC clauses accepted ?	YES / NO